Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled) ~~A method for delivery of a therapeutic neurotrophin to damaged, diseased or defective neurons in the mammalian brain, the method comprising directly delivering a neurotrophic composition, comprising a neurotrophin encoding expression vector, into one or more delivery sites within the brain; wherein the neurotrophin is expressed in a cell that is, or is in proximity to, a defective, diseased or damaged neuron; and wherein further contact with the neurotrophin ameliorates the defect, disease or damage.~~

2. (Cancelled) ~~The method according to Claim 1, wherein the region of the brain containing the targeted neurons is the substantia nigra.~~

3. (Cancelled) ~~The method according to Claim 2, wherein the targeted neurons are dopaminergic neurons.~~

4. (Cancelled) ~~The method according to Claim 1, wherein the expression vector is a lentiviral vector.~~

5. (Cancelled) ~~The method according to Claim 4, wherein the neurotrophic composition is a fluid having a concentration of neurotrophin encoding viral particles in the range from 10^{10} to 10^{15} particles per ml of neurotrophic composition.~~

6. (Cancelled) ~~The method according to Claim 5, wherein from 2.5 µl to 25 µl of the neurotrophic composition is delivered to each delivery site.~~

7. (Cancelled) ~~The method according to Claim 1, wherein the treated mammal is a human and the expression vector encodes a human neurotrophin.~~

8. (Cancelled) ~~The method according to Claim 7, wherein the neurotrophin is human glial cell derived neurotrophic factor (GDNF).~~

9. (Cancelled) ~~The method according to Claim 7, wherein the human is suffering from Parkinson's disease, and the disease is ameliorated by stimulation of growth of dopaminergic neurons.~~

10. (Cancelled) ~~The method according to Claim 9, wherein the disease is ameliorated by reversal of deficits in motor function associated with the Parkinson's disease.~~

11. (Cancelled) ~~The method according to Claim 7, wherein the human is suffering from Alzheimer's disease, and the disease is ameliorated by stimulation of growth of cholinergic neurons.~~

12. (Cancelled) ~~The method according to Claim 11, wherein the disease is ameliorated by improvement of cognitive function whose impairment was associated with Alzheimer's disease.~~

13. (Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is neurturin.~~

14. (Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is NGF.~~

15. (Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is NT-4/5.~~

16. (Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is persephin.~~

17. (Cancelled) ~~The method according to Claim 1, wherein the expression vector is an adeno-associated vector.~~

18. (Cancelled) ~~The method according to Claim 4, wherein the lentiviral expression vector is HIV-1.~~

19. (Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is expressed within 500 μm of a targeted cell.~~

20. (Cancelled) ~~The method according to Claim 1, wherein each direct delivery site is no more than 10 mm from another direct delivery site.~~

21. (New) A method for delivery of a therapeutic neurotrophin to targeted defective, diseased or damaged dopaminergic neurons in the mammalian brain, the method comprising directly delivering a neurotrophic composition, comprising a neurotrophin encoding transgene, into one or more delivery sites within a region of the brain containing targeted neurons, whereby the transgene is expressed in, or within 500 μm from, a targeted cell, and no more than about 10 mm from another delivery site; and wherein further contact with the neurotrophin ameliorates the defect, disease or damage.

22. (New) The method according to Claim 21, wherein the region of the brain containing the targeted neurons is the substantia nigra.

23. (New) The method according to Claim 21, wherein the expression vector is a lentiviral vector.

24. (New) The method according to Claim 21, wherein the treated mammal is a human and the expression vector encodes a human neurotrophin.

25. (New) The method according to Claim 24, wherein the neurotrophin is human glial cell-derived neurotrophic factor (GDNF).

26. (New) The method according to Claim 22, wherein the human is suffering from Parkinson's disease, and the disease is ameliorated by stimulation of growth of dopaminergic neurons.

27. (New) The method according to Claim 26, wherein the disease is ameliorated by reversal of deficits in motor function associated with the Parkinson's disease.

28. (New) The method according to Claim 21, wherein the neurotrophin is neurturin.

29. (New) The method according to Claim 21, wherein the neurotrophin is NGF.

30. (New) The method according to Claim 21, wherein the neurotrophin is NT-4/5.

31. (New) The method according to Claim 21, wherein the neurotrophin is persephin.

32. (New) The method according to Claim 32, wherein from 2.5 µl to 25 µl of the composition is delivered to each delivery site.

33. (New) The method according to Claim 21, wherein the expression vector is an adeno-associated vector.

34. (New) The method according to Claim 23, wherein the lentiviral expression vector is HIV-1.